# EMPLOYMENT and PAY ROLLS

DETAILED REPORT JULY 1948

United States Department of Labor Bureau of Labor Statistics Prepared by

Division of Employment and Occupational Outlook

Branch of Employment Statistics

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ESTIMATES OF MANUFACTURING PRODUCTION WORKERS - NEW SERIES

Industries in Selected Major Industry Groups

In this detailed report the Bureau presents a new series of production-worker estimates for the individual industries comprising the major industry groups listed below. The new estimates have been adjusted to Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series.

Only the industries indicated below were affected; comparison of the remaining industries, in the groups specified, with 1946 bench-mark levels indicated that no adjustment was necessary.

Lumber and timber basic products:
Sawmills and logging camps
Planing and plywood mills

Leather and leather products:
Leather
Boots and shoes

Paper and allied products:
Paper and pulp
Paper goods, other

Printing, publishing, and allied industries:
Printing; book and job

Products of petroleum and coal:
Petroleum refining

Rubber products:
Rubber tires and inner tubes

This report shows the new production-worker employment estimates and indexes of employment and weekly pay rolls for the months currently presented. A set of summary sheets presenting comparable data from January 1939, to date, for the industries in these groups will be provided upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

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# EMPLOYMENT AND PAY ROLLS

Detailed Report

July 1948

Explanatory notes outlining briefly the concepts, methodology, and sources used in preparing data for this report appear in the appendix. See pages i - ix.

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Data for the 2 most recent months shown are subject to revision

2.
TABLE 1: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division

		1948	1947		
Industry division	July	June	May	July	June
TOTAL	45,074	45,008	44,616	43 <b>,6</b> 86	43,816
Manufacturing	16,155	16,113	15,892	15,580	15,672
Mining	922	950	935	890	919
Contract construction	2,217	2,173	2,052	2,043	1,957
Transportation and public					. 1
utilities	4,135	4,105	4,0422	4,155	4,129
Trade	9,647	9,671	9,617	9,3 <b>i</b> 6	9,324
Finance	1,754	1,726	1,716	1,675	1,650
Service	4,645	4,663	4,738	4,686	4,711
Government	5,599	5,607	5,624	5,341	5,454

TABLE 2: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Major Industry Group

		1948		1947		
Major industry group	July	June	May	July	June	
ALL MANUFACTURING	16,155	<b>1</b> 6 <b>,1</b> 13	15,892	15,580	15,672	
DURABLE GOODS	8,145	8,121	8,114	7,874	8,050	
Iron and steel and their products Electrical machinery Machinery, except electrical Transportation equipment, except automobiles	1,895 713 1,561	724 1,579	1,894 727 1,568 565	1,854 742 1,519	1,871 759 1,558	
Automobiles Automobiles Nonferrous metals and their products Lumber and timber basic products Furniture and finished lumber products Stone, clay, and glass products	556 984 456 912 542 526		964 467 851	527 941 462 793 534 502	594 939 475 798 541 515	
NONDURABLE GOODS	8,010	7,992	7,778	7,706	7,622	
Textile-mill products and other fiber manufactures Apparel and other finished textile	1,366	1,418	1,416	1,305	1,325	
products Leather and leather products Food Tobacco manufactures Paper and allied products Printing, publishing, and allied industries Chemicals and allied products Products of petroleum and coal Rubber products Miscellaneous industries	1,235 422 1,912 96 475	1,263 419 1,789 98 477	1,247 404 1,610 97 476	1,141 417 1,785 97 462	1,141 414 1,666 97 470	
	716 748 245 238 557	719 759 245 243 562	<b>7</b> 59	706 752 237 250 554	705 748 235 257 564	

4.
TABLE 3: Estimated Number of Wage and Salary Workers in Selected Nonmanufacturing Industries, by Major Industry Group

		191.7			
Major industry group	July	June	May	July	June
MINING	922	950	935	890	9 <b>1</b> 9
Anthracite	81	82	81	79	80
Bituminous coal	395	426	,423	379	409
Metal.	103	104	102	101	103
Quarrying and nonmetallic	97	97	95	98	- 98
Crude petroleum and natural gas production 1/	246	241	234	233	229
FRANSPORTATION AND PUBLIC UTILITIES	4,135	4,105	4,042	4,155	4,129
Transportation	2,872	2,860	2 <b>,</b> 8 <b>0</b> 9	2,943	2,934
Communication	745	734	.731	721	712
Other public utilities	518	511	502	491	483
GOVERNMENT	5,599	5,607	5,624	5,341	5,454
Federal	1,833	1,804	1,788	1,828	1,886
State and local	3,766	3,803	3,836	3,513	3,568

<sup>1/</sup> Includes well drilling and rig building.

TABLE 4; Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government Employment and Pay Rolls in Washington, D. C. 1/

		Employmen			Pa	y rolls		
	(as of	first of	month)		(total)			
Area and branch		1948	1	1247		1948		1947
Market	July	June	TERY	July .	July	June	May	July
Total (including areas outside United States)								
TOTAL FEDERAL	2,084.3	2,053.9	2,038.9	2.103.2	\$520.818	\$502,235	\$474.725	\$494,351
Executive	2,044.7	2,014.5	1,999.2	2,062.2	511,142			484,811
Defense agencies	919.8	916.9	909.9	936.5	224,853	222,329	205,912	213.772
Post Office Dopt.	471.2	458.2	455.7	439.6	118,605	102,653	100,925	96,591
Other agencies	653.7	639.4	633.6	686.1	167.684	167,699	158,519	. 174,448
Legislative	7.3	7.3	7.3	7.3	2,600	•	*	2,483
Judicial	3.5	3.5	3.5	3.1	1,301	1,279	4	1
Government corporations		28.6	28.9	30.6	5.775	•		( -
Continental United States		- Laborator para de la desagrador						
TOTAL FEDERAL	1,858.2	1,823.9	1,808.7	1,848.5	479.953	461,406	434,657	453,649
Executive	1,825.6	1,791.5	1,776.1	1,815.2	470,914	452,529	426,011	444,743
Defense agencies	732,2	724.7	717.1	718.5	192,514	189,974	174,209	180,976
Post Office Dept,	469.7	456.6	454.1	438.1		102,306		1
Other agencies	623.7	630.2	604.9	658.6	160,149	i		
Legislative	7.3	7.3	7.3	7.3	2,600			
Judicial	3.4	3.4	3.4	3.0	1,263		1	1
Government corporations	1	21.7	21.9	23.0	5,176		1	7
Washington, D. C.								
TOTAL GOVERNMENT	233.1	229.3	228.9	231,1	65,748	66,658	63,492	64,577
District of Columbia	.							
government	19.1	18.6	18.7	18.4	3,477	4,561	4,422	
Federal	214.0	210.7	210.2	212.7	62,271	62,097	59,070	61,19
Executive	206.1	202.8	202.3	204.8	59,455	59,350	56,400	58,50
Defense agencies	69.0	67.6	67.2	67.9	19,548	19,250	18,045	18,53
Post Office Dept.	7.5	7.4	7.4	7.1	2,298	2,300	2,234	2,29
Other agencies	129.6	127.8	127.7	129.8	37,609	37,800	36,121	37.67
Legislative	7.3	7.3	7.3	7.3	2,600	2,536	2,469	2,48
Judicial	.6	.6	.6	.6	216	211	201	210

See the glossary for definitions.

<sup>1/</sup>Data for Central Intelligence Agency are excluded starting August 1947 for employment and July 1947 for pay rolls.

6.
TABLE 5: Personnel and Pay of the Military Branch of the Federal Government 1/
(In thousands)

D		1948	1947			
Personnel and pay	July	June	Меу	July	June	
PERSONNEL, TOTAL	1,463	1,439	1,419	1,592	1,632	
Army and Air Force Navy Marine Corps Coast Guard	<u>2</u> / 940	2/ 930	2/ 916	990	1,021	
	420	407	403	490	496	
	84	82	80	93	94	
	20	20	20	19	21	
Men	1,449	1,423	1,403	1,5 <b>7</b> 2	1,609	
	<b>1</b> 4	16	16	20	23	
PAY, TOTAL	\$227,084	\$277,368	\$278,967	\$339,128	<b>\$335,391</b>	
Army and Air Force Navy Marine Corps Coast Guard	168,070	173,955	176,651	200,676	203,764	
	90,431	85,522	84,136	115,734	109,047	
	13,884	13,551	13,974	16,212	17,272	
	4,699	4,339	4,207	6,506	5,308	
By type of pay:  Pay rolls  Mustering-out pay  Family allowances  Leave payments  Cash  Bonds	246,422	243,239	242,292	259,172	262,505	
	2,581	5,756	9,057	12,670	12,465	
	26,343	26,475	25,736	25,036	24,459	
	1,738	1,898	1,882	42,250	35,962	
	351	495	486	3,718	3,697	
	1,387	1,403	1,396	38,532	32,265	

See the glossary for definitions.

 $<sup>\</sup>underline{1}/$  Because of rounding, the individual figures do not necessarily add to group totals.

<sup>2/</sup> Air Force personnel, 375,000 in May, 384,000 in June, and 388,000 in July, 1948.

TABLE 6: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments for Selected States

		1948		1947		
State	June	Мау	April	June	May	
Connecticut	765	767	,772	769	770	
Illinois	3,174	3,126	3,110	3,122	3,104	
Indiana	1,209	1,197	1,179	1,193	1,184	
Maine	270	259	253	257	252	
Maryland	:707	698	686	665	671	
Massachusetts	1,730	1,720	1,701	1,696	1,691	
Minnesota	803	782	767	770	760	
Montana	138	136	135	135	133	
Nevada 1/	49	i 148	148	49	<b>*</b> 48	
New Jersey	1,593	1,576	1,568	1,567	1,532	
New York	5,416	5 <b>,3</b> 85	5,380	5,381	5,387	
Pennsylvania	3,606	3,577	3,520	3,530	3,520	
Rhode Island	288	287	288	285	284	
Texas	1,720	1,693	1,685	1,643	*1,613	
Utah	172	174	166	169	171	
Vermont 1/	96	514	94	95	94	
Washington	655	641	659	664	65 <b>7</b>	
Wisconsin	993	977	973	966	<b>95</b> 3	

See explanatory notes, sections H and I.

<sup>1/</sup> Does not include contract construction.

<sup>\*</sup> Revised.

8.
TABLE 7: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State

David and a City of		1948		1947		
Region and State	June	May	April	June	May	
NEW ENGLAND:  Maine 1/ New Hampshire Vermont 1/ Massachusetts Rhode Island Connecticut 1/	115.2	108.2	105.7	108.2	106.8	
	82.7	81.6	82.6	79.3	78.7	
	37.8	37.8	38.1	38.4	38.7	
	725.5	723.4	729.7	724.7	734.3	
	146.5	147.0	149.9	147.0	147.7	
	396.5	401.1	406.4	410.4	415.0	
MIDDLE ATLANTIC: New York New Jersey Pennsylvania	1,831.7 742.3 1,492.0	1,829.0 740.7 1,487.1	1,850.4 746.0 1,495.3	1,841.6 745.2 1,487.2	1,858.0 727.0 *1,494.8	
EAST NORTH CENTRAL: Ohio Indiana Illinois Michigan Wiscensin 1/	1,228.1	1,221.3	1,230.7	1,244.5	1,238.7	
	546.4	541.9	540.0	* 553.6	550.1	
	1,228.7	1,203.5	1,198.0	1,238.3	1,232.0	
	962.7	998.5	1,002.7	1,013.1	980.3	
	429.7	420.0	426.3	427.9	423.5	
WEST NORTH CENTRAL:  Minnesota 1/  Iowa 1/  Missouri 1/  North Dakota  South Dakota  Nebraska  Kansas	203.3	190.9	188.7	194.5	193.5	
	149.8	135.1	133.8	148.6	146.7	
	343.9	339.3	339.9	345.4	347.1	
	7.1	6.7	6.4	* 6.8	6.7	
	11.9	11.3	11.3	11.5	11.3	
	43.0	36.1	34.9	43.1	42.5	
	84.5	77.0	73.3	81.0	79.5	
SOUTH ATLANTIC: Delaware Maryland District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida 1/	46.5	45.7	46.5	45.4	* 45,7	
	229.4	228.5	228.2	224.3	228.9	
	17.1	17.2	17.4	17.2	17.1	
	211.9	210.8	212.8	207.9	209.4	
	133.9	132.4	131.9	132.6	131.5	
	381.7	381.4	382.6	366.0	366.4	
	200.5	199.3	199.3	188.9	188.7	
	252.7	252.0	252.4	246.2	249.7	
	90.0	93.2	96.5	88.2	88.9	

Domin and State		<b>1</b> 948	1947		
Region and State	June	May	April	🗗 June	May
EAST SOUTH CENTRAL:			•		
Kentucky	127.0	125.9	128.2	123.6	123.9
Tennessee	250.7	250.8	25 <b>1,5</b>	245.2	245.7
Alabama 1/	228.3	228.0	227.3	221.1	222.8
Mississippi	89.5	88.1	88.6	90.9	88.5
MISSISSIPPI	09.7	00.1	00.0	90.9	00.7
VEST SOUTH CENTRAL:					
Arkansas 1/	76.6	75.1	74.8	74.2	74.7
Louisiana	139.6	137.8	138.3	138.6	136.6
Oklahoma 1/	68.9	65.2	65.5	62.6	61.4
Texas	354.8	341.7	338.7	339.3	324.8
				l	
MOUNTAIN:			•		
Montana	17,7	17.1	17.1	17.8	17.1
Idaho	19.8	18.7	17.9	20.1	19.2
Wyoming	6.8	6.5	6.3	6.3	6.1
Colorado	56.3	53.3	54.0	54.6	53.8
New Mexico 1/	10.0	9.3	8.8	9.1	9.1
Arizona 1/	16.0	15.7	15.3	14.8	14.6
Utah	25,8	24.2	22.6	24.9	24.1
Nevada 1/	3.4	3.3	3.3	3.3	3.3
PACIFIC:			•		
Washington	163.4	152.4	175.3	179.3	174.9
Oregon	112.8	110.7	110.2	119.1	117.1
California					
OGILIOINIA	712.9	696.3	695.8	689.3	693.0

See explanatory notes, sections H and I.

<sup>1/</sup> Series based on Standard Industrial Classification. Data for Iowa, Minnesota, Missouri, and Oklahoma may not be strictly comparable with those published prior to the current report.

<sup>\*</sup> Revised. .

10.
TABLE 8: Estimated Number of Production Workers in Manufacturing Industries
(In thousands)

To To where the second	<del></del>	1948	<u> </u>	1947		
Industry group and industry	July	June	May	July	June	
ALL MANUFACTURING	12,973	12,954	12,738	12,562	<b>1</b> 2,672	
DURABLE GOODS NONDURABLE GOODS	6,667 6,306	6,658 6,296	6,642 6,096	6,452 6,110	6,639 6,033	
Durable goods						
IRON AND STEEL AND THEIR PRODUCTS	1,601	1,610	1,600	1,569	1,588	
Blast furnaces, steel works, and rolling mills Gray-iron and semisteel castings Malleable-iron castings Steel castings Cast-iron pipe and fittings Tin cans and other tinware Wire drawn from purchased rods Wirework Cutlery and edge tools Tools (except edge tools, machine tools, files, and saws) Hardware Plumbers' supplies Stoves, oil burners, and heating	526.5 104.7 36.1 68.2 28.6 47.4 28.0 41.8 21.8 24.6 49.3 38.8	108.8 37.9 69.6 28.9 44.7 28.7 40.2 22.1 25.1 49.8	517.7 107.1 37.3 68.4 28.4 42.8 29.4 41.1 23.1 25.2 51.9 39.3	503.0 113.0 33.7 64.0 27.1 44.3 30.6 39.0 21.5 23.9 49.1 38.3	115.0 35.6 65.4 27.4 42.7 31.0 39.9 23.5	
equipment, not elsewhere classified Steam and hot-water heating	78.7	78.7	79.5	82.7	84.3	
apparatus and steam fittings Stamped and enameled ware and	57.0	60.5	60.8	60.3	64.0	
galvanizing Fabricated structural and	110.1	111.0	110.9	109.2	<b>1</b> 10 <b>.</b> 9	
ornamental metalwork Metal doors, sash, frames,	59•3	59.6	60.0	59.1	59•2	
molding, and trim Bolts, nuts, washers, and rivets Forgings, iron and steel Wrought pipe, welded and heavy-	10.4 28.1 35.1	10.4 28.5 34.9	10.2 28.6 35.1	9.6 27.7 35.9		
riveted Screw-machine products and wood	19.8	20,1	18.8	17.3	17.1	
screws Steel barrels, kegs, and drums Firearms	35.2 7.9 21.5	7.9	36.4 7.6 21.2	36.0 8.4 19.3	37•3 8•2 19•0	
BLECTRICAL MACHINERY	535	546	548	567	584	
Electrical equipment Radios and phonographs Communication equipment	351.4 85.8 86.9	88.9	357.4 90.0 90,6	368.8 93.3 94.0	98.3	

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

		7	1947		
Industry group and industry	July	1948 June	May	July	June
MACHINERY, EXCEPT ELECTRICAL	1,199	1,217	1,207	1,171	1,208
Machinery and machine-shop products Engines and turbines Tractors	487.5 52.3 60.0	493.2 52.1 60.4	489.6 53.5 56.3	490.8 53.1 56.8	501.3 53.1 57.0
Agricultural machinery, excluding tractors Machine tools Machine-tool accessories Textile machinery Pumps and pumping equipment Typewriters	74.8 46.8 51.8 41.3 66.3 22.8	76.3 47.0 55.4 42.0 67.7 23.7	75.2 47.5 55.4 41.6 69.3 23.8	64.4 50.6 55.4 36.4 74.1 14.5	59.1 39.0 77.0
Cash registers; adding, and calculating machines Washing machines, wringers, and	45.2	45.8	45 <b>.</b> 6	37.9	38.1
driers, domestic Sewing machines, domestic and	15.6	16.4	16.0	14.6	15.0
industrial Refrigerators and refrigeration	14.1	14.0	13.9	12.0	10.8
equipment	84.2	84.8	82.5	77.2	78.9
TRANSPORTATION EQUIPMENT, EXCEPT AUTOMOBILES	430	434	1438	403	472
Locomotives Cars, electric- and steam-railroad Aircraft and parts, excluding	26.4 54.5	26 <b>.</b> 3 55 <b>.0</b>	26.4 53.9	23.8 55.1	24.3 54.9
aircraft engines Aircraft engines Shipbuilding and boatbuilding Motorcycles, bicycles, and parts	130.3 25.6 103.7 10.8	127.6 25.9 108.9 12.4	125.1 25.1 116.1 12.9	129.3 26.8 87.7 13.0	133.9 26.9 140.4 13.3
AUTOMOBILES	784	737	767	<b>7</b> 53	758
NONFERROUS METALS AND THEIR PRODUCTS	388	398	398	39 <b>3</b>	408
Smelting and refining, primary, of nonferrous metals Alloying; and rolling and drawing of nonferrous metals, except	41.9	41.9	41.4	40.8	40.4
aluminum Glocks and watches Jewelry (precious metals) and	51.8 25.9	52.5 28.3	52.6 28.3	54 <b>.3</b> 24 <b>.</b> 8	57.6 27.5
jewelers' findings Silverware and plated ware Lighting equipment Aluminum manufactures Sheet-metal work, not elsewhere	25.7 26.4 30.2 39.0	26.3 27.3 30.8 42.2	26.4 27.2 30.4 42.7	24.7 23.7 36.4 40.0	25.3 24.3 37.0 43.6
classified	35.5	34.9	<b>3</b> 5•2	37.6	38.6

12.
TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

	1947					
Industry group and industry	July	1,948 June	May	July	1947 June	
LUMBER AND TIMBER BASIC PRODUCTS 1/	828	<b>7</b> 99	772	721	727	
Sawmills and logging camps Planing and plywood mills	680.0 147.7	653 <b>.</b> 1 145 <b>.</b> 8	627 <b>.</b> 7 144 <b>.</b> 0	589•9 130•9	593•3 133•5	
FURNITURE AND FINISHED LUMBER PRODUCTS	452	459	458	445	452	
Mattresses and bedsprings Furniture Wooden boxes, other than cigar Caskets and other morticians' goods Wood preserving Wood, turned and shaped	31.0 228.1 33.2 17.6 16.1 31.6	31.2 231.7 33.2 18.1 15.7 33.1	31.2 233.3 32.5 18.6 15.4 32.1	1 1	29.9 227.0 36.2 19.2 18.6 30.2	
STONE, CLAY, AND GLASS PRODUCTS	450	458	454	430	442	
Glass and glassware Glass products made from	111.0	116.5	117.5	113.1	120.3	
purchased glass Cement Brick, tile, and terra cotta Pottery and related products Gypsum Wallboard, plaster (except gypsum),	12.4 38.1 79.8 55.6 6.7	12.3 37.6 80.1 57.6 6.6	37.1 77.7	12.4 35.7 73.3 54.3 6.1	12.6 35.3 73.0 55.5 6.0	
and mineral wool Lime Marble, granite, slate, and other	12.7 9.4	12.6 9.3	9.5	11.5 9.3	11.2 9.3	
products Abrasives Asbestos products	18.6 18.3 20.8	18.4 17.8 21.6	18.1 17.5 21.8	16.8 17.0 19.5	16.5 18.7 20.7	
Nondurable goods						
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES	<b>1,24</b> 3	1,295	1,293	1,187	1,208	
Cotton manufactures, except smallware Cotton smallwares Silk and rayon goods	13.4 108.2	52 <b>7.</b> 7 14.0 112.6	•		501.7 13.7 101.7	
Woolen and worsted manufactures, except dyeing and finishing Hosiery Knitted cloth Knitted outerwear and knitted glove Knitted underwear	167.2 125.6 11.1 28.1 46.6	173.8 135.3 11.2 30.8 48.1	11.5	158.1 125.9 10.3 27.0 43.6	28.0	
Dyeing and finishing textiles, including woolen and worsted Carpets and rugs, wool Hats, fur-felt Jute goods, except felts Cordage and twine	84.5 37.1 12.3 4.3 15.8	86.5 37.2 13.4 4.3 16.2	12.9 4.2	80.2 31.9 12.8 4.1 14.8	83.4 31.9 13.1 4.2 15.5	

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

Industry group and industry		1948			.947
	July	June	May	July	June
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS	1,070	1,095	1,082	992	993
Men's clothing, not elsewhere classified Shirts, collars, and nightwear Underwear and neckwear, men's Work shirts Women's clothing, not elsewhere	296.5 75.8 16.7 18.5	314.4 80.0 18.2 18.6	309.8 80.9 18.4 18.2	278.2 71.7 15.4 14.0	
classified Corsets and allied garments Millinery Handkerchiefs Curtains, draperies, and bedspreads Housefurnishings, other than	437.0 17.0 22.4 3.9 25.1	435.4 18.1 20.3 4.9 26.4	427.6 18.5 20.5 5.0 26.4	400.2 16.9 20.5 4.2 23.2	•
curtains, etc. Textile bags	28 <b>.</b> 2		27 <b>.</b> 7 26 <b>.</b> 8	26.6 26.9	28.6 27.1
LEATHER AND LEATHER PRODUCTS 1/	376	373	359	373	370
Leather Boot and shoe cut stock and findings Boots and shoes Leather gloves and mittens Trunks and suitcases	47.2 17.7 240.2 12.8 13.3	17.8 236.6	47.5 17.3 225.5 12.4 13.2	48.4 18.8 237.8 11.9 11.7	18.0 235.1
FOOD	1,367	1,259	1,091	1,311	1,192
Slaughtering and meat packing Butter Condensed and evaporated milk Ice cream Flour Feeds, prepared Cereal preparations Baking Sugar refining, cane Sugar, beet Confectionery Beverages, nonalcoholic Malt liquors Canning and preserving	190.3 39.3 22.4 32.6 39.8 29.1 13.8 226.3 21.3 7.2 56.4 44.6 79.3 246.2	31.6 38.6 28.7 13.0 224.6 18.3 7.0 57.3 41.0 74.8	17.7 6.3 56.0 38.5 66.3	33.4 39.4 29.6 13.1 216.6 20.8 8.1 57.9 35.5 74.0	33.1 37.9 29.0 12.2 213.2 20.4 7.1 60.2 32.2 70.6
TOBACCO MANUFACTURES 1/	83	85	84	84	84
Cigarettes Cigars Tobacco (chewing and smoking)	33.6 41.7		33.1 43.7		
and snuff	7.6	7.7	7.6	7.8	7.7

14.
TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

Tanàna hara ana any ao 2 de 3 de 1		1948			1947		
Industry group and industry	July	June	May	July.	June		
PAPER AND ALLIED PRODUCTS 1/	388	390	389	380	<b>38</b> 8		
Peper and pulp Paper goods, other Envelopes Paper bags Paper boxes	206.0 60.5 12.3 17.4 90.9	61.7 12.5	204.78 61.5 12.7 17.6 91.4	197.3 60.2 11.6 17.8 92.6	197.9 61.7 11.9 18.2 97.0		
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES 1/	430	433	432	430	431		
Newspapers and periodicals Printing; book and job Lithographing Bookbinding	146.8 183.0 31.2 33.4	134.4	146.4 184.2 30.9 35.1	142.2 184.3 31.5 37.0	142.0 183.7 32.4 37.5		
CHEMICALS AND ALLIED PRODUCTS	564	572	572	562	56 <b>1</b> .		
Paints, varnishes, and colors Drugs, medicines, and insecticides Perfumes and cosmetics Scap Rayon and allied products Chemicals, not elsewhere	51.1 62.9 10.9 22.3 64.2	63.5 10.9 22.0	50.7 63.6 11.0 21.7 63.4	48.6 66.7 11.7 24.0 61.0	50.0 67.8 12.0 24.3 52.5		
classified Explosives and safety fuses Compressed and liquefied gases Armunition, small-arms Fireworks Cottonseed oil Fortilizors	192.8 23.7 10.0 7.7 2.2 12.5 23.2	23.1 10.1 7.8 2.5	195.6 22.2 10.0 7.8 2.6 13.6 29.4	197.7 19.6 9.8 6.9 2.4 11.6 23.8	198.8 21.2 9.9 7.1 2.9 11.9 25.0		
PRODUCTS OF PETROLEUM AND COAL 1/	170	170	167	165	163		
Petroleum refining Coke and byproducts Paving materials Roofing materials	117.0 31.9 2.7 17.4	2.7	114.7 31.1 2.4 17.3	114.3 29.0 2.8 18.2	112.4 28.8 2.6 17.7		

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

Industry many and industry		1948		1947		
Industry group and industry	July	June	May	Jul.y	June	
RUBBER PRODUCTS 1/	190	195	195	200	207	
Rubber tires and inner tubes Rubber boots and shoes Rubber goods, other	90.9 20.7 78.9	91.9 21.8 81.7	91.4 21.7 81.7	102.9 20.1 76.8	105,8 21.4 79.5	
MISCELLANEOUS INDUSTRIES	425	429	432	426	436	
Instruments (professional and scientific), and fire-control equipment Photographic apparatus	27.8 38.8	27.5 38.1	27.5 37.8	27.5 38.3	28.1 37.4	
Optical instruments and ophthalmic goods Pianos, organs, and parts Games, toys, and dolls Buttons Fire extinguishers	23.8 12.7 41.7 12.5 2.8	25.5 13.5 40.9 12.9 2.7	26.7 13.7 40.2 12.8 2.7	27.9 14.9 36.1 10.7 2.9	28.9 15.2 34.8 11.8 2.9	

1/ Estimates for the individual industries comprising the major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Comparable data from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

Data for the individual industries comprising the major industry groups listed below supersede data shown in publications dated prior to:

Major Industry group	: Mimeographed release	: Monthly Labor Review
Tobacco manufactures	July 1948	August 1948
Lumber and timber basic products	September 1948	October 1948
Leather and leather products	September 1948	October 1948
Paper and allied products	September 1948	October 1948
Printing, publishing, and allied	-	-
industries	September 1948	October 1948
Products of petroleum and coal	September 1948	October 1948
Rubber products	September 1948	October 1948

16.
TABLE 9: Estimated Number of Employees in Selected Nonmanufacturing Industries 1/
(In thousands)

		1948	19	947	
Industry group end industry	July	June	May	July	<b>J</b> une
MINING: 2/					
Coalf			-4.		
Anthracite	76.1	77.4	76.4	74.2	75.7
Bituminous coal Metal	378	407	1405	363	392
Iron	91.7		91.4	90.6	91.9
Copper	33.7 26.6	33•7 26 <b>:</b> 7	32,7	32,6	32.4
Lead and zinc	15.1		26.5 16.4	25.7 16.3	25.7.
Gold and silver	8.3	8.3		8.1	17.8 8.0
Miscellaneous	.8.0	7.9	7.7	7.9	7.9
Quarrying and nonmetallic	86.8	86.8	85.1	88.6	88.3
Crude' petroleum and natural gas		(0,0	9732	00.0	90.5
production 3/	136.9	133.5	128.7	130.8	128.5
TRANSPORTATION AND PUBLIC UTILITIES	3			-	
Class I steem railroads 4/	1,362	1,352	1,321	1,383	1,375
Street railways and busses 5/	246	249	249	254	253
Telephone	643	633	630	614	605
Telegraph 6/	36.0		36.3	38.2	38.5
Electric light and power	283	279	274	267	263
SERVICE:	•	:			į
Hotels (year-round)	374	379	2 <b>77</b>	280	286
Power laundries 2/	239	238	- 377 233	382 250	385 249
Cleaning and dyeing 2/	92.6	2.30 94 <b>.</b> 7	233 93.4	97.7	100.8
	70	J∓•1		21•1	100.0

2/ Includes production and related workers only.
3/ Does not include well drilling or rig building.

5/ Includes private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

<sup>1/</sup> Unless otherwise noted, includes all nonsupervisory employees and working supervisors.

<sup>4/</sup> Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railroads include those with over \$1,000,000 annual revenue. Source: Interstate Commerce Commission.

<sup>6/</sup> Includes all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries
(1939 Average = 100)

	F.m.	olovnen	nt inde	exes.	1	av-ro	ll inde	xes
Industry group and industry		1948		1947		1948		1947
indubbily group and indubbily	July	June	May	July	July	June	May	July
ALL MANUFACTURING	158.4	158.1	155.5	153.3	360,1	<b>3</b> 59 <b>.</b> 0	346.7	321.8
DURABLE · GÖODS ·	184 6	18h h	183.9	178 7	102 1	ב בטין	390.8	359.4
NONDURABLE GOODS			133.1				303.6	285.1
tionionapin doors	-31.	T)10T	ـد و ډرډـد	T))•4	)10•1	5-101	303.0	20701
Durable goods						ν"		
IRON AND STEEL AND THEIR PRODUCTS	161.4	162.4	161.4	158.2	336.9	34 <b>0.</b> 5	3 <b>3</b> 4.4	307.2
Blast furnaces, steel works,	]				}			,
and rolling mills	125 5	701.6	700 0	300 5	060 0	060 1	CG= 1.	027 6
Gray-iron and semisteel castings	1453.3	174.8	172 2	129.5 181.7	209.9 377 8	200.4 200.1	265.4 374.3	237.6 396.3
Malleable-iron castings			194.2		1018 B	168 1	460.3	397.2
Steel castings				199.8			454.2	398.7
Cast-iron pipe and fittings			161.6					
Tin cans and other tinware							401.4	365.6
Wire drawn from purchased rods			134.9				286.1	297.6
				139.1			249.8	240.4
				128.4			298.2	264.0
Cutlery and edge tools		143.0	149.9	139.8	335.7	343.6	357.8	314.2
Tools (except edge tools, machine	1							
tools, files, and saws)				156.0			366.6	318.1
Hardware				137.6			325.8	300.2
Plumbers' supplies	147.8	<b>153.7</b>	149.8	146.0	316.7	329.0	324.0	291.4
Stoves, oil burners, and	1	•				:		
heating equipment, not		1		i		• .		
elsewhere classified	160.2	160.2	161.7	168.2	359.1	359.9	352.5	346.6
Steam and hot-water heating	1							
apparatus and steam fittings	176.4	187.4	188.2	186.8	397.2	409.5	406.0	373.8
Stamped and enameled ware	1	: : .						
and galvanizing	186.1	187.6	187.4	184.6	428.9	439.3	440.6	402.9
Fabricated structural and			,					
ornamental metalwork	167.1	167.9	169.0	166.4	329.0	345.2	345.7	320.1
Metal doors, sash, frames,								
molding, and trim	134.2	133.7	131.4	123.8	292.9	309.1	288.6	244.5
Bolts, nuts, washers, and rivets	184.5	187.3	187.8	182.1			408.2	355.1
Forgings, iron and steel	214.5	213.3	214.2	219.0	1 .		443.7	427.2
Wrought pipe, welded and								
heavy-riveted	222.1	225.1	211.0	193.8	473.0	467.3	443.1	387.8
Screw-machine products and		777			1,1500	1-105		301.0
wood screws	195.3	199.1	202.1	199.6	426.8	436.0	445.4	414.5
Steel barrels, kegs, and drums				129.1			302.6	
Firearms				362.2			915.6	776.8
	1.03.0	102	37107	302,2	3701	フーノ・フ	J1)•0	110.0
ELECTRICAL MACHINERY	206.4	210.8	211.6	218.9	1136.5	1130 6	431.6	430.0
					1.50.7	TJ7	. :EJ.4-U	750.0
Electrical equipment	102 1	105 2	105 7	201.9	405 7	406 7	398.1	396.3
Radios and phonographs				212.1			451.4	
Communication equipment			277.3		1 -			1
	101.1	E11.0	€11•2	としろもつ	) <u>-11-0</u>	ノンサ・エ	530.0	521.3
		i		i	1			1

18.
TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

			nt ind				l index	
Industry group and industry		<b>1</b> 048		1947		1948		1947
	July	June	Мау	July	July	June	May	July
MACHINERY, EXCEPT ELECTRICAL	226.9	230.4	228.5	221.7	469.5	480.7	466.4	427.4
Machinery and machine-shop	201 0			2261	1000		lan e	1500
products					489.3			456.2
Engines and turbines	200.6	279.5	200.7	204.0	204.5	601.4	617.6	578.6
Tractora Agricultural machinery,	TAT • 0	193.0	TOO.T	TOT . (	300.4	355.5	285.4	314.2
excluding tractors	262.2	267 1	062 7	205 7	573.3	505 h	571.2	462.8
Machine tools						242.9	240.7	242.3
Machine-tool accessories					361.1		389.9	
Textile machinery					437.9		444.8	348.9
Pumps and pumping equipment	266.5	272.3	278.7	298.0	585.2	596.5	610.3	
Typewriters					318.7		325,0	186.9
Cash registers; adding, and			_ , , , .		<b>J</b>		3-7,-	1.
calculating machines	229.5	232.9	231.8	192.5	506.2	505.9	489.4	378.0
Washing machines, wringers,								
and driers, domestic	209.5	220.0	214.6	195.5	438.5	480.9	454.2	395.5
Sewing machines, domestic							1.	
and industrial	179.4	178.6	177.2	152.9	458.5	444.2	428.0	331.1
Refrigerators and refrigeration	200	م جام	م امد	07.0	1000			1
equipment	239.4	241.3	234.6	219.6	489.3	508.9	472.3	426.3
TRANSPORTATION EQUIPMENT								
EXCEPT AUTOMOBILES	270.6	273.7	276.0	253.7	552.4	561.2	566.4	492.5
_	1			ł				
Locomotives	407.4	406.5	407.7	368.0	907.3	913.7	916.4	760.3
Cars, electric- and steem-	000 2	ook k	0106	001 0	1.67 0	1.00 5	478.5	482.1
Aircraft and parts, excluding	222.5	224.4	215,0	224.0	467.9	492.7	410.7	402.1
aircraft engines	328 5	321 5	215 2	326 0	661.1	6110 2	634.2	622.4
Aircraft engines					533.1		493.5	
Shipbuilding and boatbuilding					305.3		345.7	243.1
Motorcycles, bicycles, and parts							370.5	379.4
			_		_			
AUTOMOBILES	195.0	183.2	T20.2	70.4.3	423.3	380,9	<b>362.</b> 6	355.3
NONFERROUS METALS AND THEIR							· 1	1
PRODUCTS	169.1	173.8	173.7	171.4	361.2	368,1	362.5	332.1
Smelting and refining, primary,		• /						Ţ
of nonferrous metals.	าราร	151.6	140.8	127.7	338.1	350.3	321.6	200 1
Alloying; and rolling and		<b></b>	47,00		300.1	ر و در عر	الم المالي	C22.4
drawing of nonferrous								
metals, except aluminum.	133.5	135.3	135.6	140.0	283.9	277.9	268.9	262.7
Clocks and watches							327.4	264.3
Jewelry (precious metals)				1		''		
and jewelers' findings							362.4	
Silverware and plated ware	217.9	225.2	224.2	195.5	481.1	526.7	522.4	431.0
Lighting equipment	147.4	150.6	148,4	177.7	317.8	305.5	293.3	320,4
Aluminum manufactures	165.8	179.3	181.5	170.0	315.1	338.0	347.0	301.6
			•	i .	1 * 1 . 1 * .		• ;	1
Sheet-metal work, not elsewhere classified		-00	-0- 0				4 <b>1</b> 3.2	1,

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

Off the content of											
	Emp		t inde:		Pay-roll indexes						
Industry group and industry .		1948		1947	·	1948		1947			
	July	June	May	July	July	June	Мау	July			
LUMBER AND TIMBER BASIC PRODUCTS 1	196.9	190.0	183.6	171.5	511.7	497.3	461.1	394.2			
Sawmills and logging camps Planing and plywood mills	216.8 186.6	208.2 184.2	200.1 182.0	168.1	575.6 456.3	555,6 456 <b>.</b> 1	508.4 445.1	441.3 357.0			
FURNITURE AND FINISHED LUMBER PRODUCTS	137.8	<b>1</b> 39 <b>.</b> 8	139.7	135.7	320.4	326.0	325.6	298.6			
Mattresses and bedsprings Furniture Wooden boxes, other than cigar Caskets and other morticians'	128.2 117.2	130.3 117.3	131.1 114.8	125.9	296.5 297.3	304.2 304.3	318.0 307.2 281.4	301.8			
goods Wood preserving Wood, turned and shaped	123.5	124.8	133.5 122.6 130.5	149.4	348.6	334.5	270.3 328.6 303.9	260.6 392.7 268.5			
STONE, CLAY, AND GLASS PRODUCTS	153.2	156.0	154.7	146.5	335.5	347.1	343.4	298.8			
Glass and glassware Glass products made from	1	;	164.7					312.8			
purchased glass Cement Brick, tile, and terra cotta Pottery and related products Gypsum Wallboard, plaster (except	156.4 137.5 1.64.4	154.5 138.0 170.2	122.2 152.2 133.8 168.9 132.5	146.5 126.3 160.4	328.7 335.1 336.6	323 <b>.5</b> 329 <b>.</b> 9 355 <b>.</b> 2	314.3 320.8 351.1	247.2 283.5 276.4 308.6 260.2			
gypsum), and mineral wool Lime Marble, granite, slate, and			155.4 1.00.8				403.8 273.3	333.6 237.7			
other products Abrasives Asbestos products	237.2	230.4	97.8 226.0 137.1	220.0	488.4	502.4	183.2 490.6 329.9	156.7 386.0 293.2			
Nondurable goods		:				•					
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES	108.7	113.2	113.0	103.8	285.4	3 <b>0</b> 4.6	303.8	243.7			
Cotton manufactures, except smallwares Cotton smallwares Silk and rayon goods Woolen and worsted manufactures,	95.1	99.4	125.4 102.3 88.3	93.3	226,0	238.0	238.3	302.6 200.5 203.0			
except dyeing and finishing Hosiery Knitted cloth	74.8	80.5	109.9 81.3 99.4	74.9	171.1	185.6	183.6	243.0 148.5 192.8			
Knitted outerwear and knitted gloves Knitted underwear Dyeing and finishing textiles,			105.8 119.3					188.4 250.2			
including woolen and worsted Carpets and rugs, wool Hats, fur-felt Jute goods, except felts	137.4 80.0 112.3	137.6 87.0 114.2	123.9 136.4 84.2 112.0	119 <b>.7</b> 83.3 107.5	342.1 174.3 272.4	345.4 197.4 277.5	332.8 184.6 272.2	241.1 254.6 171.8 232.2			
Cordage and twine	1		•	•	•	•	303.4	•			
See explanatory notes, sections C,	r, an	u. u-, 8.	Ha cite	೯೩೦೪೪	ary 10	r uell	TT-07OHE	•			

20.
TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	Empl	oyment.	indexe		P	ay-rol	l inde	xes
Industry group and industry		1948		1947		1948		1947
	July	June	May	July	July	June	May	July
APPAREL AND OTHER FINISHED								
TEXTILE PRODUCTS	135.6	138.6	137.1	125.7	303.6	303.6	297.9	266.2
Men's clothing, not elsewhere								
classified	129.1	1.36.9	134.9	121.1	294.1	312.9	311.5	260.0
Shirts, collars, nightwear	102.5	108.2			246.6	258.5	266.8	260.0
Underwear and neckwear, men's		107.4			269.6	289.1	296.7	230.8
Work shirts	130.9	131.4	129.2		323.5			247.2
Women's clothing, not elsewhere			Ĭ					<u>'</u>
classified			3.49.4		326.6		299 <b>.3</b>	283.1
Corsets and allied garments	90.8		98.8		197.8		213.0	
Millinery	87.8		80.4		166.2		127.9	
Handkerchiefs	76.8	96.6	99.2	82.9	180.3	231.0	239.1	196.7
Curtains, draperies, and		- 10	-100					
bedspreads	141.2	148.9	143.8	130.4	316.8	339.2	334.8	283.9
Housefurnishings, other than	050 6	Oliva o	ok0 s	600.0	-a/ 0	-07.0	-1.1.	1.00
curtains, etc.			248.2		576.8		544.2	
Textile bags	223.0	210.4	212.8	213.0	493.2	470.8	404.0	438.2
LEATHER AND LEATHER PRODUCTS 1	108.3	107.4	103.3	107.5	236.9	233.4	215.4	229.0
Leather	94.3	95.7	94.9	96.7	203.6	205.2	201.1	199.6
Boot and shoe cut stock and								
findings:	88.6	88.9	86.9	94.4	178.6	179.9	169.6	182.4
Boots and shoes	104.0		97.7		231.1			224.6
Leather gloves and mittens	127.8	128.8	123.9	118.9	267.4			
Trunks and suitcases	159.6	159.3	158.6	141.0	339.5	339.5	339.8	227.2 274.3
FOOD	160.0	147.4	127.7	153.4	353.5	330.1	281.3	317.1
Slaughtering and meat packing	140.9	139.9	86.0	135.0	305.9	315.4	211.3	280.9
Butter	195.4	201.2	194.5		429.5		407.2	
Condensed and evaporated milk	205.9		198.3		506.3			470.6
Ice cream	184.9	,	1.66.0		363.2		311.3	
Flour	143.4		134.2		343.5		294.0	
Feeds, prepared	168.6	+	161.5		395.2		367.4	366.8
Cereal preparations			152.6	156.5	374.8	353.7	333.6	329.9
Baking	118.9	113.0	115.4	1 113.7	247.6	245.4	235.1	218.0
Sugar refining, cane	134.4	115.3	111.7	130.9	312.0			
Sugar, beet			54.6		128.0			
Confectionery			100.5		228.7	231.1		
Beverages, nonalcoholic		172.2		149.1	342.0		277.0	
Malt liquors	163.8	185.0 111.7	163.9	163.8	391.8 421.2	351.0	299.9	349.6 401.8
Canning and preserving	i	•		1	· '			Į.
TOBACCO MANUFACTURES 1/	88.8		90.5		205.5	<b>.</b>		i
Cigarettes	1	121.2	•	*	270.0	;		
Cigars	74.7	78.1	78.3	77.0	171.1	175.8	175.I	169.6
Tobacco (chewing and smoking)								1
and snuff	75.6	76.1	75.9	77.4	164.1	166.7	161.8	171.0
		:	Ī	1	İ	ŧ		l

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	Emp.	oyment	index	38	]	Pay-rol	l inde	x98
Industry group and industry		1948	<del></del>	1947	)	1943		3.947
	July	June	May	<b>J</b> ul.y	July	June	May	July
PAFER AND ALLIED PRODUCTS 1/	146.1	146.9	146.5	3.43.3	341.7	337.8	331-1	304.2
Paper and pulp Paper goods, other Envelopes Paper baga Paper boxes	149.5 160.2 140.9 156.3	163.6 144.0 157.8	145.8 158.5	159.5 132.7 160.5	358.9 355.3 272.9 380.0 294.9	358.4 284.0 364.4	343.2 355.0 283.3 355.4 290.4	317.2 250.7 338.6
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES 1/						264.9		
Newspapers and periodicals Printing; book and job Lithographing Bookbinding	123.7 143.4 118.9 129.5	144.5 118.3	144.3 137.6	144.4	235.5 296.0 223.5 290.1	299.3 230.3	296.7 224.1	208.9 270.5 207.4 299.2
CHEMICALS AND ALLIED PRODUCTS	195.7	198.4	198.4	195.0	430.2	432.6	422.5	387.7
Paints, varnishes, and colors Drugs, medicines, and insecticides Perfumes and cosmetics Soap Rayon and allied products Chemicals, not elsewhere	180.9 228.6 104.6 146.4 132.9	230.6 104.7 144.3	179.4 231.1 105.2 142.2 131.2	242.1 112.2 157.2	357•3 475•7 205•0 331•9 288•9	485.7 213.2 329.8	481.5 209.7 322.9	308.2 449.5 205.0 310.2 249.8
classified Explosives and safety fuses Compressed and liquefied gases Ammunition, small-arms Fireworks Cottonseed oil Fertilizers	275.8 325.4 251.5 179.8 189.9 81.8 123.4	316.5 253.7 181.1 211.8 82.8	279.8 304.7 250.9 181.6 219.7 89.1 156.1	269.1 246.8 160.9 207.6 76.0	573.1 657.7 517.0 419.8 505.7 229.6 361.0	638.4 504.3 410.3 571.3 227.8	592.0 491.7 404.1 594.9 245.9	533.7 496.0 437.4 359.1 534.3 193.8 334.5
PRODUCTS OF PETROLEUM AND COAL 1/	160.7	160.3	157.3	156.2	353•4	342.2	335.8	300.5
Petroleum refining Coke and byproducts Paving materials Roofing materials	147.0	145.9 110.3	143.2 97.1	133.7 114.0	329.7 261.2	330.8 330.1 249.2 523.3	320 <b>.</b> 6	270 <b>.5</b> 236 <b>.</b> 6

22.
TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	· Er	nployme	nt inde	exes	]	Pay-rol	l index	es
Industry group and industry		1948		1947		1948		1947
	July	June	May	July	July	June	May	July
RUBBER PRODUCTS 1/	157.5	161.6	161.1	165.1	329.1	330•2	318.9	<b>3</b> 31.2
Rubber boots and shoes	139.4	169.4 146.9 157.5	146,4	135.1	321.7	322.0 329.7 343.7	328.1	350.0 290,0 304.9
MISCELLANEOUS INDUSTRIES	173.6	175.4	176.6	174.1	373.8	386.1	384.2	349.2
Photographic apparatus	246.1	243.4 215.6					492.6 431.0	453•3 385•9
Pianos, organs, and parts Games, toys, and dolls Buttons	163.1 218.1 111.2	214.6 172.9 213.8 114.8 269.3	175.2 210.3 114.2	188.8	337.9 510.3 253.7	419.6 361.1 508.2 271.6 592.8	496.7 269.4	433.7 402.7 410.1 209.2 600.0

<sup>1/</sup> See footnote 1, table 8.

TABLE 11: Indexes of Employment and Weekly Pay Rolls in Selected Normanufacturing Industries

(1939 Average = 100)

	Em	loymer	nt inde					
Industry group and industry		1948		1947		<b>1</b> 948		1947
	July	June	May	July	July	June 1	May	July
MINING:								
Coal:			: :					
Anthracite Anthracite					192.7			200.3
Bituminous coal					293.8			229.7
Metal					202.2			186.1
Iron					333.1			307.5
Copper	106.6	106.9	106.	<b>102.</b> 9	242.4	232.9	232.6	211.6
Lead and zinc							238.9	210.1
Gold and silver	32.0	31.9	31.3	31.3	55.2	54.2	54.6	47.2
Miscellaneous					383.0			327.6
Quarrying and nonmetallic	126.7	126.8	124.2	129.4	322.3	321.7	312.5	307.0
Crude petroleum and natural gas	120 5			331. 0	01.7.7	007.1	000 1	001.0
production	119.7	TT0.1	115.2	TT4.3	241.1	55/ T	223.4	204.9
TRANSPORTATION AND PUBLIC UTILITIES								***
Class I steam railroads 1/	137.9	136.9	133.8	140.0	<u>3</u> /	3/	3/	<u>3</u> /
Street railways and busses	127.2	128.3	128.5	130.9	232.2	231.2	228.1	222.1
Telephone	202.5	199.4	198.4	193.3	336.4	327.1	326.1	302.2
Telegraph							231.1	215.2
Electric light and power							192.1	178.4
TRADE: 3/								
Wholesale	116 2	115 2	1116 5	777 7	215.3	211 8	211 8	196.5
Retail					218.9			198.5
Food							227.0	213.8
General merchandise					234.0			214:1
Apparel							211.8	192.0
Furniture and housefurnishings					178.8			155.8
Automotive					213.4			184.8
Lumber and building materials					257.3			218.8
SERVICE:							**************************************	
Hotels (year-round) 4/	116.0	117.6	117.0	118.3	234.7	236.5	234.6	222.0
Power laundries	122.1	121.5	119.0	127.8	240.6	238.3	234.6 232.3	238.5
Cleaning and dyeing	159.2	162.9	160.6	167.9	308.0	324.8	312.4	310.5
	-//-				]	5=.50	J	

See footnotes, table 9, and explanatory notes, sections C, F, and G.

Source: Interstate Commerce Commission.
 Not available.
 Includes all nonsupervisory employees and working supervisors.
 Money payments only; additional value of board, room, uniforms, and tips, not included.

### EXPLANATORY NOTES

- Sec. A. Scope of Employment Revisions The employment estimates shown in this report for the industry divisions (e.g., manufacturing, mining, etc.) and industry groups (e.g., iron and steel, electrical machinery, etc.) have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series.
- Sec. B. Sources of Bench-Mark Data The chief purpose of revisions published in the April 1948 DETATLED REPORT, was to adjust the levels of employment estimates to bench-mark data through 1946. In preparing estimates for private employment prior to 1939, the various industrial censuses taken by the Bureau of the Census were used as sources of bench-mark data. Data obtained from the Federal Security Agency are the main bases for 1946 bench marks. Bench marks for State and local government are based on data compiled by the Bureau of the Census, while most of the data on Federal Government employment is made available by the U. S. Civil Service Commission. The Interstate Commerce Commission is the source for railroads, and the U. S. Maritime Commission for water transportation.
- Sec. C. Revisions of Production-Worker Estimates Data for the manufacturing major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Estimates for the individual manufacturing industries, formerly adjusted to data through 1945, are now being adjusted to 1946 bench-mark levels. As these revisions are completed, they are published in this report and indicated by appropriate footnotes. In the nonmanufacturing industries, the entire series of mining industries have been adjusted to 1946 benchmark levels.

Since the data shown in this report cover only the current months, a set of summary sheets for each industry presenting comparable figures from January 1939 to date, by months, will be provided upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

Sec. D. How Employment Estimates Are Made - Estimates of changes in the level of employment are based on reports from a sample group of establishments, inasmuch as full coverage is prohibitively costly and time-consuming. In using a sample, it is essential that an accurate base be established from which estimates may be carried forward. This base or "bench mark" is either a complete count or an estimate with a satisfactory degree of accuracy.

- 1 -

When a new bench mark becomes available, estimates prepared since the last bench mark are reviewed to determine if any adjustment of level is required. This is the basic principle of employment estimating used by the BLS. It yields a satisfactory compromise between a slow but highly accurate complete count on the one hand, and a rapid but less accurate sample count on the other.

Briefly, the Bureau of Labor Statistics computes employment estimates as follows: first, a bench mark or level of employment is determined; second, a sample of establishments is selected; and third, changes in employment indicated by this reporting sample are applied to the bench mark to determine the monthly estimates of employment between bench-mark periods. For example, if the latest complete data on employment for an industry were 40,200 in September 1945, and if the industry has a reporting sample of 13 establishments employing 23,200 workers in September and 23,800 in October, the October estimate would be prepared as follows:

$$40,200 \times \frac{23,800}{23,200} = 41,240$$

In general, data showing month-to-month changes in employment reflect the fluctuations shown by establishments reporting to the Bureau of Laber Statistics. However, the usual estimating method is inadequate in the finance and service industries, which have a preponderance of small establishments. A special sampling procedure has been introduced, involving the scientific selection of a sample of cities and of a representative list of blocks in these cities. Data obtained from the establishments in these blocks yield substantially better estimates of month-to-month changes in employment in the finance and service industries than would be obtained by the use of the sampling procedure employed for other industries. For railroads and the Federal Government, complete reports of employment are available.

Why Revisions Are Necessary - Because reports are not immediately available from new firms, they are frequently introduced into the BLS sample after they have been in operation for some time. This lapse of time produces a rather consistent understatement which becomes larger from year to year. It is important, therefore, that estimates not be allowed to go uncorrected for too long a period. The most recent revisions correct for the downward bias that had accumulated in the nonmanufacturing series beginning January 1945 and in the manufacturing series beginning January 1946. Revisions in some industry divisions were made in order to incorporate greater refinements in methodology and new source materials that have become available.

Sec. E. Comparability With Other Types of Employment Data - The Bureau of Labor Statistics employment estimates are based upon reports submitted by cooperating establishments and therefore differ from employment information obtained by household interviews, such as the Monthly Report of the Labor Force.

The BLS estimates of employment in nonagricultural establishments differ from the Monthly Report of the Labor Force total nonagricultural employment estimates in several important respects. For example: (1) The BLS estimates cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month; in Federal establishments during the pay period ending just before the first of the month; and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once; (2) Proprietors, self-employed persons, domestic servants, and unpaid family workers are excluded.

Sec. F. Pay-Roll Indexes - Cooperating establishments are instructed to report pay rolls of production or nonsupervisory workers prior to deduction for old age and unemployment insurance, withholding taxes, bonds, and union dues. Pay for sick leave, holidays, and vacations taken is included. Respondents are instructed to exclude pay for vacations not taken as well as cash estimates of any payments in kind. Bonsuses, unless earned and paid regularly each pay period, are also excluded.

The methodology for obtaining pay-roll estimates is similar to that for employment estimates. Sample changes showing monthly movements are used in projecting established bench marks to secure current pay-roll estimates. These pay-roll estimates are converted into indexes, using the 1939 average as a base.

Sec. G. Source of Data - Employment and pay-roll estimates are based on reports from cooperating establishments. Excluding about 9,000 block-sample returns, the approximate number of establishments, and workers covered, for each of the industry divisions are shown below:

Approximate Coverage of BIS Employment and Pay-Roll Sample

Industry division	: Number : Employees or product			on
	: of	: workers		
	:establishme	nts: Number	: Percent of	f total
Manufacturing	34,200	7,503,000	59	
Mining	2,800	361,000	<b>5</b> 3	
Contract construction	14,000	492,000	25	
Public utilities	7,200	912,000	77	
Trade:	.,	•	• •	
<b>Wholesale</b>	12,400	343,000	19	
Retail	35,000	935,000	22	
Sorvice:	•			
Hotels (year-round)	1,200	133,000	35	
Power laundries and	·	~ <del>-</del> •		
cleaning and dyeing	3 1,600	68,000	21	

Sec. H. Coverage of Employment Estimates - The employment estimates shown in tables 1, 2, 3, 6, and 7 cover all full- and part-time wage and salary workers who worked or received pay during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, demestic servants, and personnel of the armed forces are excluded. The estimates and indexes shown in tables 8 and 10 refer to production and related workers as defined in the glossary, page viii.

Sec. I. State Estimates - State estimates are prepared in cooperation with various State Agencies as indicated on page v. estimates for manufacturing have been adjusted to recent data made available under the Federal Social Socurity program. Since some states have adjusted to more recent bench-mark data than others, and because varying methods of computation are used, the total of the state estimates differs from the national total (see tables 1 and 2). Because of these recent revisions the state estimates for manufacturing are not consistent with the unrevised data shown prior to June 1947 for total employment in nonagricultural establishments, by state. Comparable series of manufacturing estimates for each state, January 1943 to date, and also for nonagricultural employment for selected states, through December 1946, are available upon request to the cooperating State agency or the appropriate BLS regional office. Estimates of nonagricultural employment, by state. for those States which are now publishing such estimates are shown in table 6. These totals are consistent with the manufacturing estimates in table 7. As nonagricultural estimates for additional States become available, they will be shown in table 6.

### COOPERATING STATE AGENCIES

Alabama - Dept. of Industrial Relations, Montgomery 5.

Arizona - Unemployment Compensation Div., Employment Security Commission, Phoenix.

Arkansas - Employment Security Div., Dept. of Labor, Little Rock. California - Div. of Labor Statistics and Research, Dept. of Indus-

trial Relations, San Francisco 3.

Connecticut - Employment Security Div., Dept. of Labor and Factory Inspection, Hartford 15.

Delaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.

Florida - Unemployment Compensation Div., Industrial Commission, Tallahassee.

Georgia - Employment Security Agency, Dept. of Labor, Atlanta 3.

Idaho - Employment Security Agency, Industrial Accident Board, Boise.

Illinois - Dept. of Labor, Chicago 1.

Indiana - Employment Security Div., Indianapolis 4.

Iowa - Employment Security Commission, Des Moines 8.

Kansas - State Labor Dept., Topeka.

Louisiana - Div. of Employment Security, Dept. of Labor, Baton Rouge 4.

Maine - Unemployment Compensation Commission, Augusta.

Maryland - Dept. of Labor and Industry, Baltimore 2.

Massachusetts - Div. of Statistics, Dept. of Labor and Industries, Boston 10.

Michigan - Dept. of Labor and Industry, Lansing 13.

Minnesota - Div. of Employment and Security, Dept. of Social Security, St. Paul 1.

Missouri - Div. of Employment Security, Dept. of Labor and Industrial Relations, Jefferson City.

Montana - Unemployment Compensation Commission, Helena.

Nebraska - Div. of Placement and Unemployment Insurance, Dept. of Labor, Lincoln 1.

Nevada - Employment Security Dept., Carson City.

New Jersey - Dept. of Labor, Trenton 8.

New Mexico - Employment Security Commission, Albuquerque.

New York - Div. of Placement and Unemployment Insurance, Dept. of Labor, New York 17.

North Carolina - Dept. of Labor, Raleigh.

Oklahoma - Employment Security Commission, Oklahoma City 2.

Pennsylvania - Federal Reserve Bank of Philadelphia, Philadelphia l (Manufacturing); Bureau of Research and Information, Dept. of Labor and Industry, Harrisburg (Nonmanufacturing).

Rhode Island - Div. of Census and Information, Dept. of Labor, Providence 2.

Tennessee - Dept. of Employment Security, Nashville 3.

Texas - Bureau of Business Research, University of Texas, Austin 12.

Utah - Dept. of Employment Security, Industrial Commission, Salt Lake City 13.

Vermont - Unemployment Compensation Commission, Montpelier.

Virginia - Div. of Research and Statistics, Dept. of Labor and Industry, Richmond 21.

Washington - Employment Security Dept., Olympia.

Wisconsin - Statistical Dept., Industrial Commission, Madison 3.

Wyoming - Employment Security Commission, Casper.

### BLS REGIONAL OFFICES

- New England Regional Director, U. S. Bureau of Labor Statistics, Old South Bldg., 294 Washington St., Boston 8, Massachusetts (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
- North Atlantic Regional Director, U. S. Bureau of Labor Statistics, 1000 Parcel Post Bldg., 341 Ninth Avenue, New York 1, New York (Delaware, Pennsylvania, New Jersey, New York).
- North Central Regional Director, U. S. Bureau of Labor Statistics, 312 National War Agencies Bldg., 226 W. Jackson Blvd., Chicago 6, Illinois (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota, Wisconsin).
- Southern Regional Director, U. S. Bureau of Labor Statistics, 6th Floor Silvey Bldg., 114 Marietta Street, N. W., Atlanta 3, Georgia (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas).
- Pacific-Rocky Mountain Regional Director, U. S. Bureau of Labor Statistics, 546 Federal Office Bldg., San Francisco 2, California (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming).

Technical advice and assistance on employment statistics in the states of Virginia, West Virginia, Maryland, and the District of Columbia will be given by the Bureau's Washington Office.

### **GLOSSARY**

- Continental United States Covers only the 48 States and the District of Columbia.
- Contract construction Covers only firms engaged in the construction business on a contract basis for others. Force-account construction workers, i.e., hired directly by and on the pay rolls of Federal, State, and local government, public utilities, and private establishments, are excluded.
- Defense Agencies Covers civilian employees of the National Military Establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Office of Selective Service Records, War Assaus Administration, Office of Defense Transportation, Office of Scientific Research and Development, National Security Resources Board.
- Family Allowances Represents the Government's contribution; the amount contributed by the personnel is included under pay rolls.
- Federal Government-Executive branch Includes U. S. Navy Yards,
  Federal arsenals, and force-account construction. Fourth-class
  postmasters are included under the executive branch in table 4,
  but are excluded from the government data shown in tables 1 and 3.

Employment shown here for the executive branch differs from data published by the U. S. Civil Service Commission in the following respects: (1) Employment toollected and published by the Civil Service Commission as of the last day of the month, is here presented as of the first day of the next month; (2) substitute rural mail carriers are excluded; (3) employment in December of each year includes the additional postal employees necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) seaman and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission are excluded; (5) the Panama Railroad Company is shown here under Government corporations but is included under the executive branch by the Civil Service Commission.

- Financo Covers establishments operating in the fields of finance, insurance, and real estate; excludes the Federal Reserve District Banks and the mixed ownership banks of the Farm Credit Administration.
- Government Covers Federal, State, and local governmental establishments performing legislative, executive, and judicial functions, as well as all government-owned and operated establishments and institutions (arsonals, navy yards, hospitals, etc.), government corporations, and government force-account construction. The data shown in table 1 exclude fourth-class postmasters because they presumable have other major jobs.
- Government corporations Covers only three corporations: The Panama Railroad Company, the Federal Reserve banks, and the mixed-ownership banks of the Farm Credit Administration. All other corporations are included under the executive branch.
- Indexes of production-worker employment Estimates of productionworker employment expressed as a percentage of the average employment in 1939.
- Indexes of production-worker weekly pay rolls Estimates of production-worker weekly pay rolls expressed as a percentage of the average weekly pay roll for 1939.
- Leave payments Payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel who were discharged prior to September 1, 1946 for accrued and unused leave and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds represents face value; interest is paid in addition when bonds are cashed. Lump-sum payments for terminal leave, which were authorized by Public Law 350 of the 80th Congress, and were started October 1947, are excluded here and included under pay rolls.
- Manufacturing Covers only privately owned establishments; governmental manufacturing operations such as arsenals and navy yards are excluded.

Military personnel and pay rolls - Data are for personnel on active duty. Reserve personnel ere excluded if on inactive duty or if on active duty for a briof training or emergency period. Personnel is as of the first of the month and pay rolls are for the entire month. Through October 1, 1947, discharged officer personnel were included until the end of their terminal-leave period; discharged enlisted personnel were included from October 1, 1946 through October 1, 1947 only. After October 1, 1947, lump-sum terminal-leave payments at time of discharge (authorized by Public Law 350 of the 80th Congress) were made.

Coast Guard pay rolls for all periods and Army pay rolls through April 1947 represent actual expenditures. Other pay rolls represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy and Coast Guard include cash payments for clothing-allowance balances in January, April, July, and October.

Mining - Covers establishments engaged in the extraction from the earth of organic and inorganic minorels which occur in nature as solids, liquids, or gases; includes various contract services required in mining operations, such as removal of overburden, tunnelling and shefting, and the drilling or acidizing of oil wells; also includes ore dressing, beneficiating, and concentration.

Nonagricultural establishments - Governmental or private business establishments; (1) that are physically located within continental United States; and (2) whose principal activity can be classified under one of the following industry divisions - manufacturing, mining, contract construction, transportation and public utilities, trade, finance, service, or government.

Pay rolls - Private pay rolls represent weekly pay rolls of both full- and part-time production and related workers (or nonsupervisory employees and working supervisors) who worked or received pay for any part of the pay period ending nearest the 15th of the month, before deductions for old-age and unemployment insurance, group insurance, withholding tax, bonds, and union dues, but after deductions for damaged work. Includes pay for sick leave, holidays, and vacations taken. Excludes each payments for vacations not taken, retreactive pay not earned during period reported, value of payments in kind, and benuses, unless earned and paid regularly each pay period. In mining industries further deductions are made for explosives or other supplies furnished by the company. In coal mining portal-to-portal pay is included. Federal civilian pay rolls are for all employees before deductions for income tax, retirement, and bends.

Production and related workers - Includes working foremen and all nonsupervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, products development, auxilliary production for plant's own uso (e.g., power plant) and record-keeping and other services closely associated with the above production operations. Excludes supervisory employees (above the working foreman level) and their clerical staffs, routemen, salesmen, and other groups of nonproduction workers defined below under wage and salary workers.

Service - Covors establishments primarily engaged in rendering services, to individuals and business firms. Excludes automobile repair services, government owned and operated hospitals, museums, etc., and domestic service.

Trade - Covers establishments angaged in wholesale trade, i.e., selling merchandise to retailers, and in retail trade i.e., selling merchandise for personal or household consumption, and rendering services incidental to the sale of goods. Includes auto repair services.

Transportation and public utilities - Covers only privately owned and operated enterprises engaged in providing all types of transportation and related services; telephone, tolegraph, and other communication services; or providing electricity, gas, steam, water, or sanitary service. Government owned and operated establishments are included under government.

Wage and salary workers - In addition to production and related workers as defined above, includes workers engaged in the following activities: executive, purchasing, finance, accounting, legal, personnel (including cafeterias, medical, etc.), professional and technical activities, sales, sales-delivery, advertising, credit, cellection, and in installation and servicing of own products, routine office functions, factory supervision (above the working foreman level) and other workers not included as production workers. Also includes employees on the establishment pay roll engaged in new construction and major additions or alterations to the plant who are utilized as a separate work force (force-account construction workers).

Wage earner - See production workers.

Washington, D. C. - Data for the executive branch of the Federal
Government also include areas in Maryland and Virginia which are
within the metropolitan area, as defined by the Bureau of the Census.